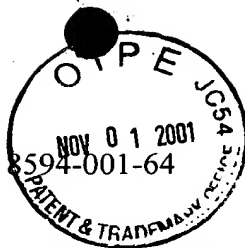


DOCKET NO.



8594-001-64

#10

C. Barnes
4/10/02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Anthony BEVERINA, et al.

ART UNIT: 2123

SERIAL NO.: 09/453,509

EXAMINER: BRODA, S.

FILING DATE: December 3, 1999

FOR: METHOD AND APPARATUS FOR RISK MANAGEMENT

RESPONSE TO NOTICE OF NON-RESPONSIVENESS

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

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SIR:

Applicants gratefully acknowledge the determination by the Examiner that the previous Amendment was bona fide. Applicants hereby respond to the issues raised by the Examiner in the Office communication dated October 1, 2001.

2.1: Applicants hereby state that no products or services incorporated the claimed subject matter prior to December 3, 1999. After this date, some aspects of the invention were incorporated into the Site Profiler product as discussed in the July, 2000 article in The Economist entitled "Science and Technology: Serious Games" as previously noted by the Examiner. The simulations relating to training officers to command chemical-warfare response teams mentioned in that article do not incorporate the invention of the present application.

2.2: The two documents requested by the Examiner (i.e., Documents (1) and (2) listed on page 4 of the July 17, 2001 Amendment) are attached to an IDS submitted herewith.

3: Applicants have reviewed MPEP Section 310 and do not believe it is applicable.

ADDITIONAL REMARKS

Applicants wish to further supplement their previous response. During the interview held on May 22, 2001, the Examiner expressed concern about the following statement at page 11 of the specification:

The Computational Engine 230 combines user-entered data, along with data stored in the Database Module 230, to calculate risk and all of its underlying components. The Computational Engine 230 uses elaborate artificial intelligence and simulation algorithms to analyze and assess the specific targets, threats, vulnerabilities, and ultimately, the risks at a user's site.

The Applicants submit that the above-mentioned algorithms are adequately described in the specification to allow one of ordinary skill in the art to practice the invention. The specification discloses an exemplary Bayesian network 500 in Figure 5. The highest level node of this network represents risk for an actor with a weapon and a delivery system against a target. As seen from Fig. 5, the highest level node depends upon many sub-nodes. As discussed in the specification, many of the inputs to the subnodes come directly from the GUI (graphical user interface) 202. Specification, page 13, line 10. One of ordinary skill in the art would understand that an example of such a node is the "Asset Attractiveness" node.

However, the specification also discloses that other inputs are derived from intermediate AI, simulation, or model calculations. Specification, page 13, lines 10-12. Threat vectors, blast consequences, and accessibility of a target are given as examples of nodes that require additional complex calculations to be conducted, and the specification discloses that such calculations are managed by the Computational Engine 230. Specification, page 13, lines 12-14.

One of the nodes shown in Fig. 5 is labeled "vulnerability." This node corresponds to "vulnerabilities" in the above-quoted statement. As disclosed in Fig. 5, the vulnerability node

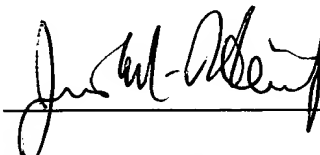
depends in part upon a consequences node. The consequences node, in turn, depends in part upon a physical effect node. The specification discloses that existing blast and NCBR (nuclear, chemical, biological and radiological) models can be used to calculate such physical effects and gives specific examples of such prior art models at page 16. Applicants respectfully submit that one of ordinary skill in the art would understand how to use such models to calculate physical effects and would understand to use the output of the models as input to the Physical Effect node of Fig. 5. The mechanics of inputting the output of the models to the input of the nodes is, of course, dependent upon the model used. A description of the types of data input to the exemplary models and the type of data output by the models and used as inputs to the physical effects nodes is discussed in detail in the specification at pages 28-42.

Another of the nodes of Fig. 5 is labeled "Accessability." The specification discloses that accessability is determined by the vectors of approach that are calculated by the VAT 200. Specification, page 24, lines 21-22. The process of building these vectors is discussed in detail at pages 54-55 and illustrated in Fig. 37. Part of the process of building these vectors involves the Dynamics Module, which is responsible for calculating and updating the state of physical objects (e.g., a truck) during the simulation of threat ingress, is discussed at pages 55-56 and illustrated in Fig. 38. Applicants respectfully submit that the foregoing descriptions, while requiring complex algorithms, are well understood and capable of being practiced by those of ordinary skill in the art.

Applicants believe that, in view of the forgoing remarks, the application is now in condition for allowance and respectfully requests notice of the same.

Respectfully submitted,

PIPER MARBURY RUDNICK & WOLFE LLP

A handwritten signature in black ink, appearing to read "Steven B. Kelber", is written over a horizontal line.

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2123/4
✓

DOCKET NO.: 8594-001-64

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

Re: Serial No.: 09/453,509
Applicant(s): Anthony BEVERINA, et al.
Filing Date: December 3, 1999
For: METHOD AND APPARATUS FOR RISK MANAGEMENT
Group Art Unit: 2123
Examiner: S. BRODA

SIR:

Attached hereto for filing are the following papers:

FEE TRANSMITTAL
RESPONSE TO NOTICE OF NON-RESPONSIVENESS
INFORMATION DISCLOSURE STATEMENT
FORM PTO-1449
CITED DOCUMENTS (2)
LETTER TO OFFICIAL DRAFTSMAN
FORMAL DRAWINGS (53 SHEETS)

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Our check in the amount of \$ 180.00 is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary extension of time to make the filing of the attached documents timely, please charge or credit the difference to Deposit Account No. 50-1442. Further, if these papers are not considered timely filed, then a request is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

PIPER MARBURY RUDNICK & WOLFE LLP

Steven B. Kelber
Attorney of Record
Registration No.: 30,073

James M. Heintz
Registration No. 41,828

FEE TRANSMITTAL



FEE TRANSMITTAL				Docket No.		8594-001-64			
				Serial No.		09/453,509			
				Filing Date		December 3, 1999			
				Inventor(s)		Anthony BEVERINA, et al.			
				Group Art Unit		2123			
TOTAL AMOUNT OF PAYMENT				\$180.00		Examiner		S. BRODA	

1. <input checked="" type="checkbox"/> Applicant claims small entity status. <input checked="" type="checkbox"/> Charge any <u>UNDERPAYMENT</u> or credit any <u>OVERPAYMENT</u> in the indicated fees to Deposit Account No. 50-1442. <input type="checkbox"/> Charge the indicated fees to Deposit Account No. 50-1442.										FEE CALCULATION (continued)																					
2. <input checked="" type="checkbox"/> Check enclosed.										3. ADDITIONAL FEES																					
					Large Entity		Small Entity		Fee Description																						
Fee Code		Fee (\$)				Fee Code		Fee (\$)				Fee Paid																			
FEE CALCULATION										105		130		205		65		Surcharge-late filing fee or oath													
1. BASIC FILING FEE										127		50		227		25		Surcharge-late provisional filing fee or cover sheet													
Large Entity		Small Entity				Fee Description		139		130		139		130		Non-English specification															
Fee Code		Fee (\$)				Fee Code		Fee (\$)				Fee Paid				147		2520		147		2520		Ex parte reexam. fee							
101		740				201		370				Utility filing fee				115		110		215		55		1-mo. ext. of time							
106		330				206		165				Design filing fee				116		400		216		200		2-mo. ext. of time							
107		510				207		255				Plant filing fee				117		920		217		460		3-mo. ext. of time							
108		740				208		370				Reissue filing fee				118		1440		218		720		4-mo. ext. of time							
114		160				214		80				Provisional filing fee				128		1960		228		980		5-mo. ext. of time							
SUBTOTAL (1)										\$0.00		119		320		219		160		Notice of Appeal											
2. EXTRA CLAIM FEES										120		320		220		160		Appeal Brief													
tot. claims				-		20*		=		0		x		\$9		=		0		121		280		221		140		Request for Oral Hearing			
ind. claims				-		3*		=		0		x		\$42		=		0		142		1280		242		640		Utility/Reissue Issue Fee			
<input type="checkbox"/>		Multiple Dependent Claims				\$140		=				143		460		243		230		Design Issue Fee											
Large Entity		Small Entity				Fee Description		144		620		244		310		Plant Issue Fee															
Fee Code		Fee (\$)				Fee Code		Fee (\$)				122		130		122		130		Petitions to the Commissioner											
103		18				203		9				Claims in excess of 20				126		180		126		180		IDS Submission		180.00					
102		84				202		42				Independent claims in excess of 3				581		40		581		40		Assignment							
104		280				204		140				Multiple dependent claim, if not paid				179		740		279		370		For Filing RCE							
109		84				209		42				*Reissue independent claims over original patent				169		900		169		900		Expedited Design							
110		18				210		9				*Reissue claims in excess of 20 and over original patent				OTHER (indicate below):															
SUBTOTAL (2)										\$0.00																					
* or number previously paid, if greater; For Reissues, see above																						SUBTOTAL (3)		\$180.00							

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Name		Steven B. Kelber		Registration No.		30,073	
Signature				Date		11/05/01	
Name		James M. Heintz		Registration No.		41,828	

DOCKET NO.



8594-001-64

#12
C. Barnes
4/10/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Anthony BEVERINA, et al.

ART UNIT: 2123

SERIAL NO.: 09/453,509

EXAMINER: BRODA, S.

FILING DATE: December 13, 1999

FOR: METHOD AND APPARATUS FOR RISK MANAGEMENT

LETTER TO OFFICIAL DRAFTSMAN

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

It is requested that the enclosed **Fifty-Three** (53) sheets of Formal Drawings comprising Figures **1-53** be entered to replace the Informal Drawings originally filed with the application.

Respectfully submitted,

PIPER MARBURY RUDNICK & WOLFE LLP

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James M. Heintz
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